

# PATENT COOPERATION TREATY

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From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

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AUG 2004

**PCT**

## NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

<p>Applicant's or agent's file reference SMC 60533/WO</p>		<p><b>IMPORTANT NOTIFICATION</b></p>	
<p>International application No. PCT/GB 03/02135</p>	<p>International filing date (day/month/year) 16.05.2003</p>	<p>Priority date (day/month/year) 27.07.2002</p>	
<p>Applicant AVECIA LIMITED et al</p>			

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

#### 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

<p>Name and mailing address of the international preliminary examining authority:</p> <p> European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465</p>	<p>Authorized Officer</p> <p>Georgakopoulou, P Tel. +49 89 2399-6037</p> <p style="text-align: right;"></p>
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## PATENT COOPERATION TREATY

## PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SMC 60533/WO	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB 03/02135	International filing date (day/month/year) 16.05.2003	Priority date (day/month/year) 27.07.2002
International Patent Classification (IPC) or both national classification and IPC C09D11/00		
Applicant AVECIA LIMITED et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
 

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.
3. This report contains indications relating to the following items:
  - I  Basis of the opinion
  - II  Priority
  - III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV  Lack of unity of invention
  - V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI  Certain documents cited
  - VII  Certain defects in the international application
  - VIII  Certain observations on the international application

Date of submission of the demand 09.01.2004	Date of completion of this report 02.08.2004
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Frison, C Telephone No. +49 89 2399-8519



# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB 03/02135

## I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

### Description, Pages

1-9 as originally filed

### Claims, Numbers

1-8 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB 03/02135

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	
	No: Claims	1-8
Inventive step (IS)	Yes: Claims	
	No: Claims	1-8
Industrial applicability (IA)	Yes: Claims	1-8
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB 03/02135

Concerning point V

*Related documents*

- D1: EP-A-1 270 676 (MITSUBISHI CHEM CORP) 2 January 2003 (2003-01-02)
- D2: HIRSCH B. ET AL: 'some new dyes based on 3-amino-1,2,4-triazole derivatives' SBORNIK VEDECKYCH PRACI, VYSOKA SKOLA CHEMICKOTECHNOLOGICKA PARDUBICE, vol. 44, 1981, pages 285-290, XP009016260
- D3: ISRAILOV ET AL: 'spectrophotometric study of triazolyl azo compounds and their use in photometric analysis' IZVESTIYA AKADEMII NAUK TADZHIKSKOI SSR, OTDELENIE, vol. 79, no. 1, 1981, pages 45-51, XP009016261
- D4: SHEBERBACHEV, K.D ET AL: 'THE ANALYSIS OF THE SULFONIC ACIDS OF BETA-NAPHTHOL. II' REVUE GENERALE DES MATIERES COLORANTES, DU BLANCHIMENT, DE LA TEINTURE, DE L'IMPRESSION ET DES APPRETS, vol. 39, no. 81-6, 1935, pages 81-86, XP001154186

**1. Novelty**

- 1.1 Document D1 discloses metal chelated dyestuffs in combination with an aqueous medium to be used as an ink (see claims 1,21). Several azo-based compound are listed; wherein compound made by combination of 1-2 with 6-1 (ex. 4, 5), 6-9 or 6-10 are very similar to what is claimed in claim 1. However, none of the naphthalene moieties has 2 SO<sub>3</sub>H groups in positions 3 and 7 (3,6-sulpho for 6-1; 7-sulpho for 6-9; 6,8-sulpho for 6-10).  
As a result the subject-matter of claim 1 is new over D1.
- 1.2 Document D2 recites compounds similar to what is claimed in cl. 1 (see Table 1). The ligands are used in Co, Ni and Cu-complexes. Since D2 was only provided in Russian to the examining division it can not be decided up to now whether D2 anticipates the subject-matter claimed or not. In order to allow a final assessment and to streamline the proceedings the applicant is kindly asked to provide a translation of D2 (at least the relevant parts).
- 1.3 Similar considerations apply to D3 which seems to deal also with 1,2,4-Triazole-3-carboxylic acid,-disulfo-naphthalenyl-azo compounds (chemical abstract).

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB 03/02135

**2. Inventive step**

D1 is a P-document and is thus not relevant for assessing IS.

In case the SM of cl. 1 is new over D2-D3, then the objective problem over the prior art would be to produce further naphtha-azo based inks. The applicant has not shown that the selection of this particular azo-naphtha compound (formula 1) leads to an unexpected result compared to 3-6-disulpho compounds for instance. Moreover the synthesis of such 3-7 disulpho compounds does not seem to involve an IS. (3,7-disulphonaphthol are known; it is a routine procedure to study the effect of the substituent's position on the activity; see D4).

For the moment, the subject-matter of cl. 1 does not involve an inventive step (Art. 33(3) PCT).

**3. Further comments**

The applicant should be aware that in the EP phase, claims 6-8 would be objected for the following reasons:

claims 6,7: the subject-matter of those claims is an apparatus per se, not matter of what is filling the apparatus. This type of ink jet printer is known for the skilled man.

claim 8: it is not clear to determine the subject-matter for which protection is sought.